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6.10 AGRICULTURE AND SOILS

This SPPE Application is for the construction and operation of the ECGS Unit 3 Repower Project. The Project will be owned and operated by IID ("the Applicant") and will utilize the existing staffing at the ECGS. IID is an irrigation district established under Division 11 of the California water code, Sections 20500 et seq., that provides electrical power, non-potable water, and farm drainage services to the lower southeastern portion of the California desert, primarily in Imperial County. ECGS Unit 3 will continue to serve the growing electrical load demands of the region.

The Project consists of replacing the existing CE boiler with a GE Frame 7EA dry low NO_x CTG and HRSG to supply steam to the existing Westinghouse STG. The generator output from the Unit 3 Repower Project will be stepped-up to transmission voltage and interconnected to the existing IID El Centro Switching Station also located within the ECGS Site.

Most of the existing ECGS systems will continue to be used with only minor modifications. Systems that will continue to be used include the STG, cooling system, water treatment system, water supply system, control room, fire system, ammonia system, site access during operations, and electrical El Centro Switching Station.

The Project consists of two major project areas:

- Project Site – new Unit 3 CTG/HRSG, minor modifications to the existing Unit 3 cooling tower, replacement of the Unit 3 condenser, minor modifications to Unit 3 STG, the 92 kV electrical interconnection and modifications to the existing gas interconnection
- Temporary Construction Area – construction parking, construction trailers, and construction laydown area.

The total Project disturbance will be 12.5 acres, all of which is within the ECGS Site.

This section discusses the soils and agricultural resources for the Project.

6.10.1 Affected Environment

6.10.1.1 Introduction

The Project is located in the central portion of the Imperial Valley approximately 25 miles southeast of the Salton Sea and 7 miles north of the international border with Mexico. This region of the Imperial Valley includes developed land associated with the City of El Centro, undeveloped land, and agricultural land. The area lies near the center of the ancient Lake Cahuilla. This section discusses the affected soil and agricultural resources for the Project (see Figure 6.10-1, Soils in Vicinity).

The affected environments for soil and agriculture resources are described in this section. Potential impacts are discussed in Section 6.10.2, Environmental Consequences, cumulative impacts are discussed in Section 6.10.3, Cumulative Impacts, and Applicant-committed mitigation measures are presented in Section 6.10.4, Mitigation Measures.

6.10.1.2 Regional Setting

Imperial County is a rural agricultural county in the southern portion of California. The region has a long growing season and low precipitation (average 3.00 inches per year). Precipitation occurs primarily from mid-fall to mid-spring. Summers are long and hot; winters are typically mild. Imperial County is a leading agricultural area because of both environmental and cultural factors including good soils, a year-round growing season, the availability of adequate water transported from the Colorado River by a complex canal system, extensive areas committed to agricultural production, a gently sloping topography, and a climate that is well-suited for growing crops and raising livestock (Imperial County General Plan, Agricultural Element 1993a).

Approximately 20% of Imperial County is irrigated for agricultural purposes, with most of the irrigated agricultural land (512,163 acres) within the Imperial Valley. Irrigation water was first delivered to the Imperial Valley in June 1901 by the California Development Corporation by diverting it from the Colorado River through a channel cut in Mexico to the Alamo River. In 1905 the Colorado River flooded and ran uncontrolled through the Imperial Valley, inundating 488 square miles of farmland and creating the Salton Sea. The water delivery system was improved over the next several decades including the completion of the All American Canal, which replaced the Alamo Canal, in 1941. The IID has operated the water system since 1911. Irrigated agriculture in Imperial Valley is extremely diverse and includes many types of vegetable crops including lettuce, carrots, onions, tomatoes, cauliflower, and broccoli; alfalfa, Sudan grass, and other animal feed; sugar beets; wheat and other grains; melons; cotton; and various citrus, fruits, and nuts (Imperial County General Plan, Water Element 1993b).

The IID water service area is generally level, with low levels of natural erosion. Erosion is dependent on texture (e.g., clay, sand, or silt content), moisture content, and agronomic practices (i.e., cropped, fresh-tilled, or fallow). Lacustrine basin soils in IID water service area formed on nearly level old lakebeds near prehistoric Lake Cahuilla. These soils generally consist of silty clays, silty clay loams, and clay loams; are deep and highly calcareous; and usually contain gypsum and soluble salts. The central areas in IID's water service area generally have fine-textured silts, which are primarily used for crops. Soils within Imperial County have no potential for farming, unless irrigated, because of the dry climate. Continued agricultural use of soils within IID's water service area requires both irrigation and installation of subsurface tile drains to carry away water and salts that would have otherwise built up in the soils and prevented crop growth. Tile drains discharge irrigation water to surface drains.

6.10.1.3 Affected Soils Resource

Soil types near the Project are described and mapped at the level of "mapping units," which are defined to the approximate level of detail appropriate for soil management decision-making (see Table 6.10-1, Soil Mapping Units – Description and Properties). The location of, and properties of, the soil-mapping units are based on interpretation of the State Soil Geographic Data Base (STATSGO) prepared by the Natural Resources Conservation Service (NRCS 1995). As mapped, the Project Site and adjacent areas are underlain by four soil units including: Imperial-Glenbar Silty Clay Loam, Wet; Imperial Silty Clay, Wet; Meloland and Holtville Loam, Wet; and Holtville Silty Clay, Wet. Based on the current layout of the Project, only one soil-mapping

TABLE 6.10-1
SOIL MAPPING UNITS – DESCRIPTION AND PROPERTIES[1,2]

Soil Map Unit Name	Unit Soil Description	Slope (%)	Depth to Bedrock (inches)	Water Erosion Susceptibility (K Factor)[3]	Wind Erosion Susceptibility[4]	Comments
Imperial-Glenbar silty clay loams, wet, 0 to 2% slopes	Nearly level, very deep, calcareous soils formed in alluvial deposits on flood plains and lakebeds within the irrigated areas of Imperial Valley. Irrigation has caused a perched water table commonly at a depth of 36 to 60 inches, but which can rise to a depth of 18 inches during periods of heavy irrigation. This map unit averages about 40% Imperial silty clay loams and 40% Glenbar silty clay loams. The Imperial soil is pinkish gray silty clay loam from 0 to 12 inches, and pinkish gray and light brown silty clay from 12 to 60 inches. The Glenbar soil is pinkish gray silty clay loam from 0 to 13 inches, and stratified light brown clay loam and silty clay loam, with thin lenses of silty clay and sandy clay loam from 13 to 60 inches	0-2	> 60	Moderate to High (0.37 to 0.43)	Moderate (4 and 4L)	Slow to moderately slow permeability, with seasonal high water table. High to moderate shrink-swell potential. Capability unit IIIw-6 (irrigated); Capability subclass VIIIw (dryland).
Imperial silty clay, wet	Nearly level, very deep soils formed in clayey sediments on flood plains and in basins and lakebeds. Irrigation has caused a perched water table at a depth of 36 to 60 inches, which can rise to a depth of 18 inches during periods of heavy irrigation. Soil is pinkish gray and light brown silty clay from the surface to 60 inches or more. Efflorescences of gypsum and brown stains are common in the cracks and pores. In some places the surface layer is silty clay loam or clay loam.	0-2	>60	High (0.43)	Moderate (4)	Slow permeability, with seasonal high water table. High shrink-swell potential. Capability unit IIIw-6 (irrigated); Capability subclass VIIIw (dryland).
Meloland and Holtville loams, wet	Nearly level, very deep, calcareous soils formed in alluvial deposits or in eolian material on flood plains and alluvial basin floors. Irrigation has caused a perched water table at a depth of 24 to 36 inches that can rise to a depth of 18 inches during periods of heavy irrigation. The Meloland soil is light brown loam from 0 to 12 inches, stratified, very pale brown loamy fine sand and silt loam from 12 to 26 inches, pink silty clay from 26 to 38 inches, and stratified silt loam, very fine sandy loam, and loamy fine sand from 38 to 60 inches. The Holtville soil is light brown loam from 0 to 12 inches, light brown silty clay from 12 to 24 inches, pale brown silt loam from 24 to 36 inches, and very pale brown loamy very fine sand from 36 to 60 inches.	0-2	> 60	Moderate to High (0.28 - 0.43)	Moderate (4L)	Slow permeability, with seasonal high water table. Low to high shrink-swell potential. Capability unit IIIw-3 (irrigated); Capability subclass VIIIw (dryland).

TABLE 6.10-1
SOIL MAPPING UNITS – DESCRIPTION AND PROPERTIES[1,2]

Soil Map Unit Name	Unit Soil Description	Slope (%)	Depth to Bedrock (inches)	Water Erosion Susceptibility (K Factor)[3]	Wind Erosion Susceptibility[4]	Comments
Meloland very fine sandy loam, wet	Nearly level, very deep, soils formed in alluvial or eolian sediments on flood plains and alluvial basin floors. Irrigation has caused a perched water table at a depth of 24 to 36 inches. Soil is light brown very fine sandy loam from 0 to 12 inches, stratified, very pale brown loamy fine sand and silt loam from 12 to 14 inches, and pink silty clay from 14 to 71 inches. In some places, the surface layer is silt loam, loam, or fine sandy loam.	0-2	> 71	Moderate to High (0.32 - 0.43)	Moderate (4L)	Slow permeability, with seasonal high water table. Low to high shrink-swell potential. Capability unit IIIw-3 (irrigated), Capability subclass VIIIwv, dryland).
Holtville silty clay, wet	Nearly level, very deep, stratified soil formed in alluvial sediment on flood plains and alluvial basin floors. Irrigation has caused a perched water table at a depth of 36 to 60 inches, and the water table can rise to within 18 inches of the surface during periods of heavy irrigation. Soil is light brown silty clay from 0 to 17 inches, light brown to very pale brown silty clay and silt loam from 17 to 18 inches, and very pale brown loamy very fine sand from 18 to 60 inches, with sandy material below 60 inches in some areas.	0-2	>60	Moderate to High (0.28-0.43)	Moderate (4)	Slow to moderately rapid permeability. High to low shrink-swell potential. Capability unit IIw-5 (irrigated), Capability subclass VIIw (dryland).

Notes
1 Refer to Figure 6.10-1, Soils in Vicinity, for location of soil mapping units..
2 Source: Soil Survey – Imperial Valley Area, California, Parts I and II. USDA, SCS (1981).
3 Based on "K" factor values where: low < 0.2; moderate = 0.2 - 0.39; and high ≥0.4.
4 Based on WEG classes where: high = 1-2; moderate = 3-4; and low = 5-8.
NA – not available
% = percent
> = greater than

unit will be affected by the construction of the Project. The predominant map unit in the area of the ECGS Site is the Imperial-Glenbar Silty Clay Loam, Wet. The Imperial-Glenbar Silty Clay Loam is formed on fine-grained deposits within the ancient lake basin. These are "wet" series soils because they are poorly drained and have low permeabilities. The following paragraphs provide a brief description of the mapped soil units in the Project Site vicinity. Figure 6.10-1, Soils in Vicinity, presents the distribution of the soil units in the Project Site vicinity.

Imperial-Glenbar Silty Clay Loams, Wet, 0 to 2% Slope

This nearly level, very deep, poorly drained, calcareous soil forms in floodplains and lakebeds within irrigated regions of the valley. The representative soil profile is greater than 60 inches. The surface soil texture is silty clay loam. The soil is highly susceptible to water erosion and moderately susceptible to wind erosion. The permeability is slow to rapid and the shrink-swell potential ranges from moderate to high. This soil unit generally has severe limitations for building development because of the soil's shrink-swell potential and low soil strength and will require appropriate building foundation design.

This unit underlies the Project Site and much of the existing ECGS Site.

Imperial Silty Clay, Wet

This nearly level, very deep poorly drained soil forms on floodplains, basins, and lakebed in the Project study area. The representative soil profile is greater than 60 inches. The soil texture is silty clay throughout the entire soil profile. The soil is highly susceptible to water erosion and moderately susceptible to wind erosion. This soil has a seasonal high water table because of irrigation. The permeability is slow and the shrink-swell potential is high.

This soil-mapping unit is present south of the Project Site.

Meloland and Holtville Loams, Wet

This nearly level, very deep, calcareous soil forms on floodplains and basin floors within the Project study area. The representative soil profile is greater than 60 inches. The soil's surface texture is loam. The soil has a moderate to high susceptibility to water erosion and moderate susceptibility to wind erosion. This soil has a seasonal high water table because of irrigation. The permeability is slow and the shrink-swell potential is low to high.

This soil-mapping unit is present east of the Project Site.

Holtville Silty Clay, Wet

This nearly level, very deep poorly drained soil forms on floodplains and alluvial basin floors in the Project study area. The representative soil profile is greater than 60 inches. The surface texture of this soil type is silty clay. This soil is moderate to highly susceptible to water erosion and moderately susceptible to wind erosion. The soil's permeability is slow to rapid and the shrink-swell potential ranges up to a high susceptibility to wind erosion. This soil has a high seasonal water table because of irrigation. This soil unit generally has severe limitations for building development because of the soil's high shrink-swell potential and low soil strength and will require appropriate building foundation design.

This soil-mapping unit is present in the northwest corner of the ECGS Site.

6.10.1.4 Agricultural and Prime Farmland

Agriculture

The Project Site is located within the ECGS Site. There are agricultural lands to the east and north of the ECGS Site across Dogwood Road and East Villa Avenue, respectively. None of the Project components traverse either agricultural land or land covered by Williamson Act contracts.

Prime Farmland

Important farmland areas were assessed using the California Department of Conservation Farmland Mapping and Monitoring Program's Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance for Imperial County. Approximately 196,927 acres of prime farmland and 313,218 acres of farmland of statewide importance were surveyed in Imperial County in 2004 (California Department of Conservation 2004). No components of the Project are located within any areas designated as prime farmland or farmland of statewide importance based on review of available information.

6.10.2 Environmental Consequences

The environmental consequences of the Project, with respect to soil and agricultural resources, are mainly related to construction of the Project. Environmental consequences related to soils are presented in Section 6.10.2.1, Soils Resource, and environmental consequences related to agricultural resources are presented in Section 6.10.2.2, Agriculture and Prime Farmland.

6.10.2.1 Soils Resource

Appendix G of CEQA identifies the following criteria for determining significance of impacts to soils resources:

- Project results in substantial soil erosion or loss of topsoil, degradation of soils or farmland, changes in topography, or unstable soil conditions.
- Project is in an unstable soil or soil that would become unstable because of the Project, and potentially result in landslide, lateral spreading, subsidence, liquefaction, or collapse.
- Project is on expansive soil, as defined in Table 18-1 of the UBC (International Conference of Building Officials 1994), creating substantial risk to life or property.
- Project would place septic tanks or alternative wastewater disposal systems on soils incapable of adequately supporting these systems where sewers are unavailable for the disposal of wastewater.

The assessment of Project impacts to the soil resource is based on soils information presented in the published and unpublished Soil Conservation Service (SCS) soil survey information covering the Project study area (SCS 1981, NRCS 1995), the Geotechnical Investigation (Appendix C),

and consideration of the Applicant-committed mitigation measures. The Project study area soil conditions include relatively flat topography within the ECGS Site. The use of erosion control BMPs to control water and wind erosion during construction activities, and placement of impervious surfaces and/or BMPs on disturbed areas within the Project study area will effectively control soil loss after construction. Consequently, quantitative calculations of potential soil loss using the Universal Soil Loss and Chepil Wind Erosion Equations, which are typically used to quantify water and wind-induced soil loss for agricultural operations were not considered appropriate. Potential impacts of the Project on the soil resources can be divided into those involving construction activities and those related to plant operation.

Project Site

Construction-Related Impacts

Minor construction-related impacts to the soil resources are associated with development of the Project, including the demolition of existing structures and foundations, and minor grading and trenching for natural gas piping within the Project Site. Approximately 12.5 acres of land will be disturbed during construction activities with the completed Project Site improvements limited to approximately 4.0 acres. The existing ECGS Site topography is nearly flat. Some very minor grading will be required to provide a level area for the Project once several existing structures in the 4.0-acre Project Site area are removed. The surficial soils will likely be excavated and re-compacted or replaced with granular soils within and adjacent to the areas of Project facilities. Construction will include approximately 2,350 feet of 92 kV transmission line all within the ECGS Site.

Impacts during construction of the Project Site on soil resources can include alteration of the existing soil profile, increased soil erosion, and soil compaction. Alteration of the existing soil profiles, including mixing of soils, will alter the physical, chemical, and biological characteristics of native soils and underlying geology. Soil erosion causes the loss of topsoil and can increase the sediment load in surface-receiving waters downstream of the construction-site. Soil action can decrease infiltration rates, resulting in increased runoff and erosion rates. The magnitude, extent, and duration of construction-related impacts depend on the erodibility of the soil; the proximity of the construction activity to receiving water; and the construction methodologies, duration, and season. The gentle topography and localized grading in the Project Site would limit soil erosion to minor levels. The mitigation measures outlined in Section 6.10.4, Mitigation Measures, would further reduce impacts to soil resources resulting from construction of the Project to less than significant levels.

Operation-Related Impacts

The Project lies within the existing ECGS Site; therefore, no impacts to soil resources are anticipated from operations of the Project.

6.10.2.2 Agriculture and Prime Farmland

Appendix G of CEQA identifies the following criteria for determining significance of impacts to agriculture and prime farmland:

- Does the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural uses?
- Does the project conflict with existing zoning for agricultural use or a Williamson Act contract?
- Does the project involve other changes in the existing environment that, because of their location or nature, could result in conversion of farmland to nonagricultural use?

The Project does not convert prime farmland, unique farmland, or farmland of statewide importance and does not conflict with a Williamson Act contract. Furthermore, the Project is consistent with land-use zoning, and does not represent a permanent loss of farmland. Therefore, development of the Project does not represent a significant impact to agricultural resources.

Potential Impacts of Power Plant Emissions

Operation of the Project will expose soils and vegetation near the Project to slightly increased levels of air pollutants, as discussed in Section 6.1, Air Quality. As presented, these emissions would not adversely impact plant habitats. Based on the type of emissions, and the implementation of the emission control devices, impacts to the soil vegetation system from the Project emissions are expected to be insignificant.

6.10.3 Cumulative Impacts

From a soils or agricultural lands resources perspective, no cumulative impacts have been identified for the Project.

6.10.4 Mitigation Measures

The development of the Project is consistent with existing zoning and is compatible with agricultural land uses. No agricultural impacts were identified; therefore, no mitigation measures are proposed.

This section describes Applicant-committed mitigation measures that will be implemented to reduce Project-related potential impacts to the soil resource.

The following mitigation measures will be implemented to reduce potentially significant soils impacts to insignificant levels. An acceptable level of soil erosion, as used herein, is defined as that amount of soil loss that would not affect (i.e., limit) the potential long-term beneficial uses of the soil as a growth medium, or adversely affect water resources because of accelerated erosion and subsequent sedimentation. Refer to Section 6.13, Water Resources, for mitigation measures related to potential impacts to water quality associated with soil erosion.

Construction Mitigation Measures

- **Soil 1:** Conduct grading operations consistent with the City of El Centro Grading Ordinance.
- **Soil 2:** Prepare and implement a detailed Erosion Control Plan prior to construction, which may be a component of the Construction SWPPP.

- **Soil 3:** Limit soil erosion/dust generation by wetting active construction areas with disturbed soil (including parking areas) with water or by applying dust palliatives (soil binders).
- **Soil 4:** Implement drainage control measures and grade the Project Site in accordance with Construction SWPPP.

With implementation of the mitigation measures listed above, no significant unavoidable adverse impacts to the soils resources are anticipated because of construction and operation of the Project.

6.10.5 Laws, Ordinances, Regulations, and Standards

The following LORS are applicable to protection of soils resources. Applicable LORS are summarized in Table 6.10-2, Summary of LORS. Agency contacts are provided in Table 6.10-3, Agency Contact List for LORS. Required permits are summarized in Table 6.10-4, Required Permits.

TABLE 6.10-2
SUMMARY OF LORS

Jurisdiction	LORS	Requirements	Conformance Section	Administering Agency	Agency Contact*
AGRICULTURE AND SOILS					
Federal					
	Federal Water Pollution Control Act of 1972; Clean Water Act of 1977 (including 1987 amendments)	Meet discharge requirements relative to sediment because of accelerated erosion.	Section 6.10.5.1, Federal Authorities and Administering Agencies	RWQCB; Colorado River Basin Region 7, under the direction of the State Water Resources Control Board	4, 5
	U.S. Department of Agriculture, SCS, National Engineering Handbook (1983), Sections 2 and 3	Implement standards for the planning, design, and conservation of soil conservation practices.	Section 6.10.5.1, Federal Authorities and Administering Agencies	USDA NRCS.	1
State					
	California Public Resource Code § 25523(a)	Provisions relating to the manner in which the proposed facility is to be designed, sited, and operated to protect environmental quality and assure public health and safety.	Section 6.10.5.2, State Authorities and Administering Agencies	CEC	2
	California Public Resource Code §21000 et seq.; Guidelines for Implementation of CEQA, Appendix G	Environmental checklist form, evaluation of erosion or siltation and conversion of agricultural lands.	Section 6.10.5.2, State Authorities and Administering Agencies	CEC	2

TABLE 6.10-2
SUMMARY OF LORS

Jurisdiction	LORS	Requirements	Conformance Section	Administering Agency	Agency Contact*
AGRICULTURE AND SOILS					
State Continued					
	Williamson Act	Provides for lowered property taxes for lands maintained in agricultural and certain open space uses.	Section 6.10.5.2, State Authorities and Administering Agencies	Department of Conservation, Office of Land Conservation	3
	California Porter-Cologne Water Quality Control Act; Cal. Water Code, Division 7, § 13260–13269	Adequate protection of water quality by appropriate design, sizing and construction of erosion and sediment controls; obtain waste discharge requirements concerning potential surface water pollution from project area runoff.	Section 6.10.5.2, State Authorities and Administering Agencies	CEC, RWQCB Colorado River Basin Region 7	2, 4
Local					
City of El Centro					
	City of El Centro Land Use Code,	Regulations pertaining to fugitive dust control during grading. Regulations describing submittal requirements related to grading projects; description of soil test required for grading permit.	Section 6.10.5.3, Local Authorities and Administering Agencies	City of El Centro Planning/Building Department	6
	City of El Centro Land Use Code,	Regulations pertaining to construction permits.	Section 6.10.5.3, Local Authorities and Administering Agencies	City of El Centro Planning/Building Departments	6

* See Table 6.10-3, Agency Contact List for LORS, for corresponding contact information.
LORS = laws, ordinances, regulations, and standards
NRCS = National Resources Conservation Service
RWQCB = Regional Water Quality Control Board
CEC = California Energy Commission
USDA = U.S. Department of Agriculture
SCS = Soil Conservation Service

TABLE 6.10-3
AGENCY CONTACT LIST FOR LORS

FEDERAL

1 U.S. Department of Agriculture, Natural Resources Conservation Services
Raul Ramirez
1601 New Stine Rd. Suite 290
Bakersfield, CA 93309
(661) 861-4129 (ext 3)

STATE

2 California Energy Commission
Mr. Paul Richins
1516 9th Ave.
Sacramento, CA 95814
(916) 654-4074

3 California Department of Conservation
Dennis O'Bryant, Acting Assistant Director
Division of Land Resource Protection
801 K Street
M.S. 24-01
Sacramento, CA 95814
(916) 324-0850

4 Water Quality Control Board, Colorado River Basin Region 7

BASIN PLANNING
Supervisor - Joan Stormo
573-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260
(760) 346-7491

5 California Department of Water Resources
1001 I Street
Sacramento, CA 95814
Connie Anderson
(916) 341-5800

LOCAL

6 City of El Centro Building Department
1275 Main Street
El Centro, CA
Bob Williams
(760) 337-4508

Note:
LORS = Laws, Ordinances, Regulations, and Standards

TABLE 6.10-4
REQUIRED PERMITS

Issuing Agency	Type of Permit Required	Schedule
RWQCB-Colorado River Basin Region 7	Notice of Intent (NOI)	Prior to construction
	NPDES General Construction Storm Water Permit	
City of El Centro	Grading Permit, Construction Permit	Prior to construction
	Development Permit Requirements to be met	Prior to construction

Notes:
NPDES = National Pollutant Discharge Elimination System RWQCB = Regional Water Quality Control Board

6.10.5.1 Federal Authorities and Administering Agencies

The Federal Water Pollution Control Act of 1972; Clean Water Act (CWA) of 1977 (including its 1987 amendments). These authorities establish requirements for any facility or activity that has or that will discharge wastes (including sediment because of accelerated erosion) that may interfere with the beneficial uses of receiving waters.

The administering agency for the above authority is the RWQCB, Colorado River Basin, Region 7, under the direction of the State Water Resources Control Board (SWRCB).

The Construction SWPPP would incorporate all appropriate erosion control measures during construction of the Project.

U.S. Department of Agriculture (USDA), SCS, *National Engineering Handbook (1983),* Sections 2 and 3. The USDA prescribes standards of technical excellence for the SCS (now the NRCS) for the planning, design, and construction of soil conservation practices.

The administering agency for the above authority is the NRCS.

The Applicant would adhere to the appropriate standards associated with the planning, design, and construction of soil conservation practices.

6.10.5.2 State Authorities and Administering Agencies

California Public Resources Code §25523(a); CCR §§1752, 1752.5, 2300-2309, and Chapter 2, Subchapter 5, Article 1, Appendix B, Part (i). The code provides for protection of environmental quality. Regarding the Project, the code requires submission of information to the CEC concerning potential environmental impacts, and the CEC's decision on the SPPE must include consideration of environmental protection.

The administering agency for the above authority is the CEC.

CEQA, California Public Resources Code §21000 et seq.; Guidelines for Implementation of the CEQA of 1970, 14 CCR §15000 - 15387, Appendix G. The CEQA guidelines specify that: "A project will normally have a significant effect on the environment if it will … (q) Cause substantial flooding, erosion or siltation; … (y) Convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural lands."

The administering agency for the above authority is the CEC.

The Project would comply with these CEQA requirements because BMPs would be implemented to mitigate significant erosion, siltation, or flooding effects. The Project Site would not require the conversion of prime agricultural land to non-agricultural use; the LESA model does not indicate a significant impact; the Project does not represent a significant net loss of farmland; none of the Project components traverse land covered by Williams Act Contracts.

California Land Conservation Act (Williamson Act). Cal. Government Code Title 5, Part 1, Chapter 7 Section §§51200-51295. The Williamson Act provides for lowered property taxes for lands maintained in agricultural and certain open-space uses. The landowner enters into a contract with the county or city to restrict land uses to those compatible with agriculture, wildlife habitat, scenic corridors, recreational use, or open space. In return, the local authorities calculate the property tax assessment based on the actual use of the land instead of its potential value

assuming full commercial development. To be eligible, the land must be designated by a city or county as agricultural preserve, scenic highway corridor, or wildlife habitat area; or it must be actively used for the 3 years immediately preceding the beginning of the contract as a salt pond, managed wetland, recreational, or open-space area.

The administering agency for the above authority is the Department of Conservation, Office of Land Conservation.

The Project will not require the cancellation of any Williamson Act contracts.

The California Porter-Cologne Water Quality Control Act of 1972; California Water Code, §13260 - 13269; 23 CCR Chapter 9. The code requires adequate protection of water quality by appropriate design, sizing, and construction of erosion and sediment controls. Discharge of waste earthen material into surface waters resulting from land disturbance may require the filing of a report of waste discharge (Water Code §13260(a)), and provides for the issuance of waste discharge requirements regarding the discharge of any waste that can affect the quality of the waters of the state. Regarding potential surface water pollution from Project Site runoff, the waste discharge requirements may incorporate requirements based on the following sources of recommended methods and procedures:

- SWRCB. 1996. *Erosion and Sediment Control Field Manual*.
- USEPA. 1973. *Processes, Procedures and Methods to Control Pollution Resulting From All Construction Activity*. Presents information on processes, procedures, and methods for controlling sediment, stormwater, and pollutants from construction activities.
- California Department of Resources Conservation. 1978. *Erosion and Sediment Control Handbook.* Provides procedures by which physical and climatic data and erosion control practices can be considered in making an assessment of a site for determining the need for an erosion control plan and for preparing an erosion control plan.

The administering agencies for the above authority are the RWQCB (Colorado Basin, Region 7).

The Project would develop an Erosion Control Plan to address surface water runoff.

6.10.5.3 Local Authorities and Administering Agencies

City of El Centro. The City of El Centro is the administering agency for grading and building permits and the Planning and Building departments would provide agency review. The City of El Centro's grading ordinance incorporates regulations pertaining to excavation, grading, and construction. This ordinance also identifies procedures and requirements for applying for a construction permit. The grading and drainage plans for the Project would incorporate BMPs and appropriate grading techniques to control fugitive dust emissions, minimize soil erosion, and minimize the amount of cut and fill. Grading plans would implement erosion control measures for construction and a permanent stormwater drainage plan. A registered engineer would prepare the grading and drainage plans.

The Project would comply with the City of El Centro ordinances and permitting review process.

6.10.6 References

Birdsall, Stephen L. 2000. Imperial County Agricultural Commissioner's 2000 Agricultural Crop and Livestock Report.

California Department of Conservation. 2004. Imperial County, 2002-2004 Table A-8 - Land Use Conversion, Farmland Mapping and Monitoring Program.

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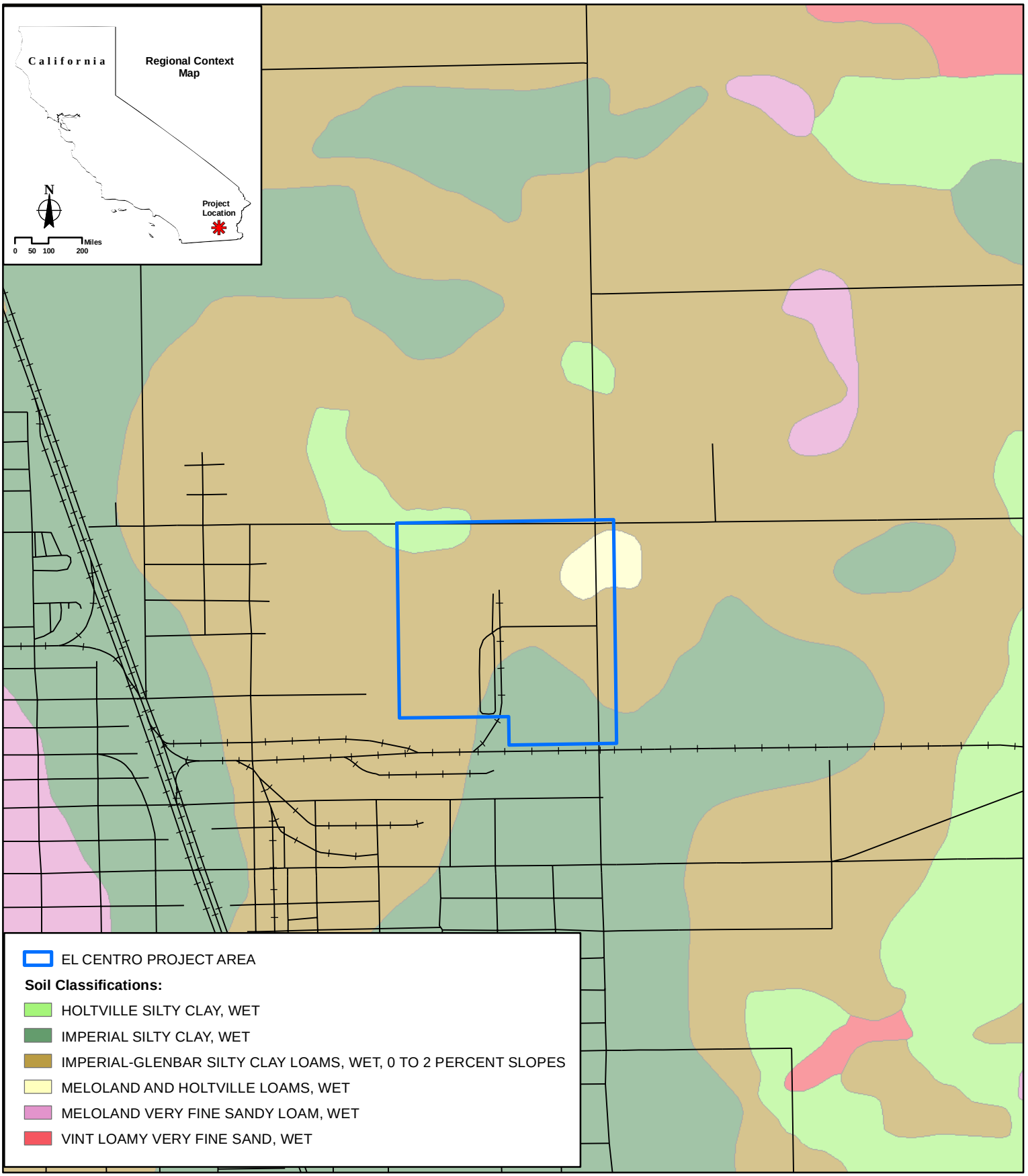

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0 400 800 1,600 Feet

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SOURCES:
TIGER (base data); U.S. Department of Agriculture: STATSGO (soils)

Soils in Vicinity

El Centro Unit 3 Repower Project
Imperial Irrigation District

URS

FIGURE 6.10-1